

Claims

What is claimed is:

*Sub 1*  
1. A compression ignition engine, comprising,  
an electronic controller, said electronic controller producing fuel  
delivery commands to control power output of said engine, said electronic  
controller including a cruise control mode;

an advanced cruise control system connected with said electronic  
controller and producing communication signals;

wherein said electronic controller receives said communication  
signals and calculates a fuel delivery command based, at least in part, on said  
communication signals at least when said electronic controller is in an advanced  
cruise control mode; and

wherein said electronic controller disengages said advance cruise  
control mode in response to receiving no valid control signal for greater than a  
first period of time.

2. The compression ignition engine of claim 1, wherein said  
electronic controller disables said advance cruise control mode in response to  
receiving no valid control signals for greater than a second period of time.

3. The compression ignition engine of claim 1, wherein said  
first period of time is less than about 500 milliseconds.

4. The compression ignition engine of claim 2, wherein said  
second period of time is less than about 3500 milliseconds.

5. The compression ignition engine of claim 1, wherein said first period of time is about 500 milliseconds.

6. The compression ignition engine of claim 2, wherein said second period of time is about 3500 milliseconds.

*Sub a3*  
7. The compression ignition engine of claim 1, wherein said electronic controller re-engages said advanced cruise control system in response to operator cruise control inputs.

8. The compression ignition engine of claim 7, wherein said operator cruise control inputs include on of a cruise control resume switch and a set switches.

9. The compression ignition engine of claim 2, wherein said electronic controller re-enables said advanced cruise control in response to operator re-initialization of the electronic controller.

10. The compression ignition engine of claim 9, wherein said operator re-initialization includes turning off the engine and turning it back on.

*Sub a4*  
11. A method of controlling a compression ignition engine equipped with an electronic controller and an advanced cruise control system, said method comprising:  
receiving communication signals from said advanced cruise control system; and  
disengaging said advanced cruise control system as a function of not receiving valid control signals for a first time period.

12. The method of claim 11, further comprising:  
disabling said advanced cruise control system as a function of not  
receiving valid control signals for a second period of time.

13. The method of claim 11, further comprising:  
re-engaging said advanced cruise control after said step of  
disengaging, in response to operator cruise control inputs.

14. The method of claim 12, further comprising:  
re-enabling said advanced cruise control in response to said  
operator turning off the engine and turning it back on.

15. The method of claim 13, wherein said operator cruise  
control inputs include an cruise control resume switch.

16. The method of claim 11, further comprising:  
engaging cruise control, after said step of disabling, in response to  
operator cruise control inputs.

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